

1994 SURVEY REPORT

APPLE ERMINE MOTH (Yponomeuta malinellus Zeller) - This detection survey was conducted under a grant from the USDA. All of the commercial apple growing areas of the state were surveyed, as well as a limited number of abandoned and backyard apple trees in the remainder of the state. Trap sites were selected at each inspector's discretion based upon risk, accessibility, and presence of suitable host material. There were approximately 188 traps placed in 26 counties across the state. Placement ranged from one to twenty-nine traps in a given county. No moths were detected. The insect is currently under quarantine by the state of Oregon and is known to occur in British Columbia, Washington, and Oregon. It could affect the export of susceptible nursery stock should it become established in Idaho.

APPLE MAGGOT (Rhagoletis pomonella (Walsh)) - A total of 136 traps were placed at 66 sites prior to July 1 near apple orchards or native hawthorn in Ada, Boise, Bonner, Canyon, Gem, Payette, and Washington counties of Idaho. The only positive catches were two sites in Boise county which caught a total of 40 adults, and those were all in native hawthorn. No catches were made in or near commercial apple orchards. This survey is performed to comply with quarantines instituted by the states of Washington, Arizona, Utah and for informational purposes for the export of apples to Mexico and other potential importers.

BEET NECROTIC YELLOW VEIN VIRUS (Rhizomania) was detected for the first time in Rupert (Minidoka county), Idaho, in June, 1992. During the 1994 growing season survey, 78 new sites were identified through aerial surveys and subsequent laboratory confirmation by the Idaho Department of Agriculture. Currently, there are eight infested counties including Bingham - 4 fields, Canyon - 10 fields, Cassia - 21 fields, Jerome - 4 fields, Lincoln - 4 fields, Minidoka - 29 fields, Power - 4 fields, and Twin Falls - 2 fields. There is a grand total of 200 confirmed infested fields in the state totaling approximately 10,000 acres. This survey is carried out in cooperation with The Amalgamated Sugar Company to comply with Michigan and Ohio quarantines against potato, pea and bean seed which could potentially carry contaminated soil.

CEREAL LEAF BEETLE (Oulema melanopus) - Active infestations of the cereal leaf beetle were detected for the first time in 1992, in Franklin county south of Preston, in southeastern Idaho. Surveys in 1994 of 240 wheat, barley, or oat fields and a few roadside grass surveys in 44 counties in the state were carried out. A minimum of four to five fields per county were surveyed. Detections were made in two new counties for the first time this year (Bannock and Boundary). The Bannock county infestation is an extension of the original Franklin county infestation. The infestation in Boundary county is an isolated one and population levels were very low with only one adult and one larvae found, although feeding damage similar to that of the cereal leaf beetle was found in several other fields.

In 1993, approximately 1,500 eggs parasitized with the egg parasite Anaphes flavipes were released. Only one adult was recovered in 1994. Additional releases are planned for 1995. In addition, in 1993 the USDA CLB lab at Niles, MI, detected the presence of Tetrastichus julis in CLB larvae collected and sent to Niles for rearing purposes. The nearest release site for these parasites had been in Morgan County, Utah, eight years earlier. Dissections of 355 larvae this past summer revealed 64.5% (229 larvae) to be parasitized. The survey is carried out to comply with a California quarantine against small grain, straw, and certain species of Pinus.

CHERRY BARK TORTRIX (Enarmonia formosana) - This detection survey was conducted under a grant from the USDA. All of the commercial cherry growing areas of the state were surveyed, as well as a limited number of abandoned and backyard cherry trees, and nurseries in the other areas of the state. There were 135 sites in 30 counties surveyed with 168 traps placed. No positive detections were made. The insect is currently under quarantine by the state of Oregon and is known to occur in British Columbia, Washington, and Oregon. It could affect the export of susceptible nursery stock should it become established in Idaho, and it is known to be a serious pest of producing cherry trees.

EUROPEAN PINE SHOOT MOTH (Rhyacionia buoliana (Denis & Schiffermüller)) - Limited infestations are known to exist in Ada, Canyon, Kootenai, and Nez Perce counties as determined by surveys performed over the past few years. In 1994, detection surveys were carried out in all areas of the state. Trap sites were selected at each inspector's discretion based upon risk, accessibility, and presence of suitable host material. There were 230 traps placed in 33 counties. Gem County was found to be positive for a new county record. No other new positive sites or counties were found. This survey is performed in support of the state's quarantine against this pest to track its movement across the state for compliance with California, Oregon and Canadian quarantines.

GYPSY MOTH (Lymantria dispar (Linnaeus)) - The Idaho gypsy moth detection survey program systematically samples all populated areas of the state in order to detect introductions of gypsy moths. Many U.S. Forest Service campgrounds are also sampled, as well as rest stops, tourist attraction sites and many other locations where people congregate. High risk areas, those cities with the highest populations and the highest potential for newly arriving families, are trapped each year. Other areas are trapped every other year or every third year. The survey will continue to expand as the rural/urban interface develops and more people move into the rural areas of the state.

Detection Trapping - In 1994, the cooperative agencies in the Idaho gypsy moth detection program placed 4,239 detection traps throughout the state. Pheromone baited traps were placed on a grid basis at a density of 4 traps per square mile. Traps were placed throughout the state in cities and towns and the surrounding urban areas and rural communities in accordance with a predetermined schedule. Campgrounds, tourist attractions and other high risk locations were also trapped.

Only one gypsy moth was caught in a detection trap in 1994. (Figure 1) This moth was caught in Pocatello. After its discovery on August 9, delimitation traps were placed in the surrounding area. No additional moths were caught. While this moth is not considered a threat, follow-up action will be taken next year with delimitation trapping in the area surrounding the catch site.

Delimitation Trapping - In 1994, delimitation trapping was done at two sites, Coeur d'Alene and Pocatello. In the city of Coeur d'Alene 94 traps were placed in the area where two gypsy moths were caught last year and two more this year. The two gypsy moths caught this year were in delimitation traps. Two delimitation traps were also placed near where the single gypsy moth was caught in Pocatello in a detection trap this year. This survey is part of a national survey to track the movement of the gypsy moth in support of a Federal quarantine.

JAPANESE BEETLE (Popillia japonica Newman) - The trapping program was expanded over the 1993 program. Traps were placed at many of the larger nurseries across the state that were known to handle large quantities of container and/or balled and burlap nursery stock, as well as recently landscaped properties, such as commercial office parks, golf courses, and apartment complexes.

There were 199 traps placed in 31 counties statewide. Traps were placed the last week of June and picked up during the last week of September or first week of October. All traps were checked every two weeks. Trapping was carried out on a site selection basis by Plant Industry inspectors with emphasis being placed on nurseries, golf courses, offices parks, landfills and apartment complexes. No positive detections were made at any sites during 1994.

Four beetles (one male and three females) were caught in 1992, at a Boise (Ada) nursery. In 1993 only a single male was detected. No feeding signs were found on any plant materials in the nursery or adjacent grounds. The 1993, detection is believed to be due to some reproduction from beetles caught at this nursery in 1992. The nursery was treated with both granular and liquid insecticide under state supervision during 1992, 1993 and 1994. No beetles were detected at this site during 1994. This survey is performed to support a state quarantine against this pest being shipped into the state from infested eastern states.

MEXICAN BEAN BEETLE (Epilachna varivestis (Mulsant)) - Two areas in Boise continue to be surveyed. A total of 5,619 homes were visited and 1,719 gardens were inspected. The parasitic wasp Pediobius foveolatus was released weekly in areas where beetle infestations had been observed in the past. Ten thousand wasps were released for seven consecutive weeks from mid-July to late-August. Parasite releases are used to augment any chemical treatment of infested gardens, in that the parasites will help to control larvae feeding on wild or undetected hosts in the vicinity of infested gardens. No Mexican bean beetle life stages were observed for the

first time in two decades. This program has been carried out for almost two decades to prevent the establishment of the beetle in the commercial bean growing areas of the state.

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